

## TOM NIKSCH

Certified Arborist 3918 MESKER PARK DR. EVANSVILLE, IN 47720 (812) 464-8733



June 28, 2012

Mr. Marcos Mateus Lawson Environmental Services 800 East Franklin Street Evansville, IN 47711

Dear Mr. Mateus:

Thank you for contacting me to help with your tree.

The objective of my visit was to assess the tree for your company and the homeowner. Attending the on-site meeting were: Marcos Mateus and Chris, Lawson Environmental Services; Chris Dietrich, Sullivan International Group, Inc.; David S. Novack, US EPA Region Five; and the homeowner.

The following information is an assessment and pertinent information about the tree at 202 East Maryland Street, Evansville, IN. My understanding is the back yard where the tree grows is an environmental cleanup area. A layer of soil was removed and other soil will be added back to the original grade. The affected area will be sodded.

Species: Southern Magnolia, Magnolia grandiflora.

Size: 34 inches Diameter at Breast Height (DBH is measured 54" above original grade). The height was estimated at 65-70 feet tall, which is a rather short tree for the diameter.

Location: The tree was approximately twenty feet north of the house in the back yard. The tree was about ten to twelve feet west of the east property line.

## Tree Condition:

Canopy: The canopy appeared in good condition. No significant dead branches were noticed. A few stubs were noticed in the outer canopy, apparently broken during the 2009 ice storm. The leaves appeared normal and were in satisfactory condition.

Numerous flower petals were on the ground under the canopy. This indicates the tree was actively blooming. The blossoms have a relatively short life, and the petals fall off. Very large specimens of this species tend to bloom near the outer part of the branches in full sun. Therefore most of the tree blossoms were located in the top and on the sunny sides of the canopy, and not visible from underneath the canopy.

Page two, Marcos Mateus, June 28, 2012

Trunk: The trunk appeared to be in a sound condition. There were no obvious cavities or defects. The trunk had a slight lean toward the east, apparently a long-term growth pattern that developed many years ago. Plants naturally grow to available light. Two large tree were located to the west.

Root System: The soil around the tree had just recently been removed, down to a depth of approximately six to eight inches below grade. The exact grade change was variable. The grade in the immediate area of the buttress roots was generally taken down to the top of those roots. As the roots grew farther away, they naturally grew deeper in the original grade. On the west side of the tree had been a sidewalk, probably about four inches thick. As the buttress roots developed, they appeared to have grown under the sidewalk. According to "before" pictures that I received, the sidewalk was broken and had been heaved upward.

The buttress roots had the soil removed approximately to the top of them, and then approximately to a six to eight inch depth farther away from the tree. Some small lateral roots were broken, but, in my opinion, not of sufficient size nor number to render the tree a high risk of uprooting.

## Conclusions/Recommendations:

- As I said in our meeting, the tree should have soil, sod, and a thorough watering as soon as possible. Watering should be continued through this hot and dry summer unless we receive substantial rainfall. A common recommended watering amount is one inch rainfall equivalent per week unless there is substantial rainfall. More watering should be done if the temperature is above normal or if there are hot, dry winds. It should be noted that a thorough soaking of the fill soil should be done as soon as the final grade is established.
- Above one-hundred degree forecasted temperatures for June 28 and several days thereafter will have an adverse impact on the tree if it is not watered thoroughly.
- My opinion is that the tree has a relatively "low risk to uproot", assuming that no tornadoes, high winds, nor unusual winter storms enter into our weather patterns.
- My opinion is that the tree has a relatively good future. However, I must point
  out that care and watering of the tree this summer will be crucial to its survival.
  Weather conditions into 2013 might also play a role in the tree's survival.

Thank you with the opportunity to help with your tree concerns.

Respectfully submitted,

Tom Niksch,

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